

# Work Order ID 59909

June 16, 2010 1:38:12 PM



Page 1

Item ID: D2230-1

Accept



Setup Start



Revision ID:

Stop



Item Name: Lug

Start Date: 6/16/10 Start Qty: 80.00



Cust Item ID:

Required Date: 6/18/10 Req'd Qty: 80.00

Customer:

Reference:

Run Start



Approvals:

Process Plan:

*[Signature]*

Date:

Tooling:

Date:

Stop



QC:

Date:

SPC (Y/N):

Date:

Sequence ID/  
Work Center ID

Operation  
Description

Set Up/  
Run Hours

Tool ID

Tool #

Plan  
Code

Accept  
Qty

Reject  
Qty

Reject  
Number

Insp.  
Stamp

Draw Nbr

Revision Nbr

D2230

Rev F

100

0.00



BAND SAW

Bandsaw

Memo

0.00

Jeaspa Bandsaw

Cut D2423 extrusion to 0.82"

Batch: 45800

*cut 10/06/16*

80

*[Signature]*

110

0.00



HAAS CNC VERTICAL MACHINING #1

HAAS 1

Memo

0.00

HAAS CNC vertical machine #1

1-Machine per folio FA927

DWG REV: *G*

FOLIO REV: *AA*

(Check for crack while loading into the machine.)

2- deburr rough edges

*10/06/17*

*MW*

*10/06/18*

80

*[Signature]*

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

# Work Order ID 59909

June 16, 2010 1:38:12 PM

Page 2

Item ID: D2230-1

Accept

Revision ID:

Item Name: Lug

Start Date: 6/16/10

Start Qty: 80.00

Required Date: 6/18/10

Req'd Qty: 80.00

Cust Item ID:

Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

QC:

Date:

SPC (Y/N):

Date:

Run Start

Stop

Sequence ID/  
Work Center ID

Operation  
Description

Set Up/  
Run Hours

Tool ID

Tool #

Plan  
Code

Accept  
Qty

Reject  
Qty

Reject  
Number

Insp.  
Stamp

120

QC2- Inspect parts off machine FAI/FAIB

0.00

QC

Memo

0.00

Quality Control

130

QC8- Inspect parts - second check

0.00

QC

Memo

0.00

Quality Control

140

Chemical Conversion Coat per QSI005 4.1

0.00

HandFinish

Memo

0.00

Hand Finishing



*Handwritten:* 10/06/17  
10/06/18

*Handwritten:* 10/06/19

*Handwritten:* 80

*Handwritten:* 0

*Handwritten:* 80

*Handwritten:* 0

*Handwritten:* m

*Handwritten:* 10

*Handwritten:* 06

*Handwritten:* 24

*Handwritten:* (80)

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

# Work Order ID 59909

June 16, 2010 1:38:13 PM



Page 3

Item ID: D2230-1

Accept



Setup Start



Revision ID:

Item Name: Lug

Stop



Start Date: 6/16/10

Start Qty: 80.00



Cust Item ID:

Required Date: 6/18/10

Req'd Qty: 80.00



Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start



QC:

Date:

SPC (Y/N):

Date:

Stop



Sequence ID/  
Work Center ID

Operation  
Description

Set Up/  
Run Hours

Tool ID

Tool #

Plan  
Code

Accept  
Qty

Reject  
Qty

Reject  
Number

Insp.  
Stamp

150

QC3- Inspect Part Finish

0.00



QC

Memo

0.00

Quality Control

80 BR 10-6-25.

160

White Gloss(Ref:4.3.5.1) per QSI005 4.3-Alum

0.00



Powdercoat

M 114841

Memo

0.00

Powder Coating

START TIME: 9:30  
OVEN TEMPERATURE: 320°  
FINISH TIME: 10:00

80 BR 10-6-25

170

QC3- Inspect Part Finish

0.00



QC

Memo

0.00

Quality Control

M 10 06 25 (80)

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

# Work Order ID 59909

June 16, 2010 1:38:13 PM



Page 4

Item ID: D2230-1

Accept



Setup Start



Revision ID:

Stop



Item Name: Lug

Start Date: 6/16/10

Start Qty: 80.00



Cust Item ID:

Required Date: 6/18/10

Req'd Qty: 80.00



Customer:

Reference:

Run Start



Approvals:

Process Plan:

Date:

Tooling:

Date:

Stop



QC:

Date:

SPC (Y/N):

Date:

Sequence ID/  
Work Center ID

Operation  
Description

Set Up/  
Run Hours

Tool ID

Tool #

Plan  
Code

Accept  
Qty

Reject  
Qty

Reject  
Number

Insp.  
Stamp

180

Identify as per dwg & Stock Location: 476

0.00



Packaging

Memo

0.00

Packaging

*10/06/28*

*(50)*

190

QC21- Final Inspection - Work Order Release

0.00



QC

Memo

0.00

Quality Control

*10/06/28*

*MF 10-6-28*

# Picklist Print

June 16, 2010 1:38:11 PM

Page 1

Work Order ID: 59909

Parent Item: D2230-1

Parent Item Name: Lug



Start Date: 6/16/10

Required Date: 6/18/10

Start Qty: 80.00

Required Qty: 80.00

Comments: IPP [D]00.11.01[ ] Added inspection level 8, and removed P/O for powder coat [IEC]

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D2423		Manufactured	No			110	f	435.4718	0.0683	5.751579			



Lug Extrusion



## Location

## Loc Qty

## Loc Code

MAT06

435.4717895

43722

180

→ 45800

255.471789

5.7515 am 6/16/10



W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

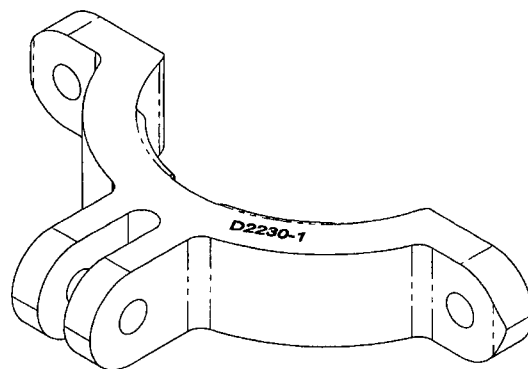
Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

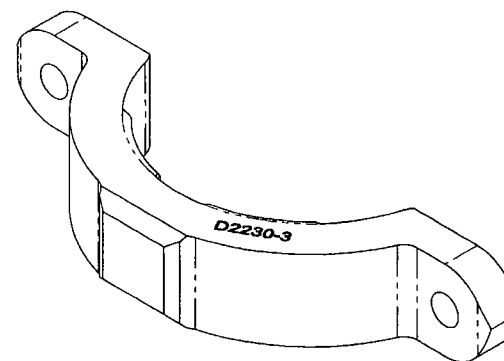
NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries





**D2230-1 MOUNTING LUG**



**D2230-3 MOUNTING LUG**

**RELEASED**  
01/06/15

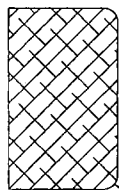


**NOTES:**

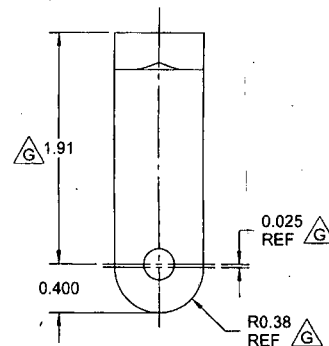
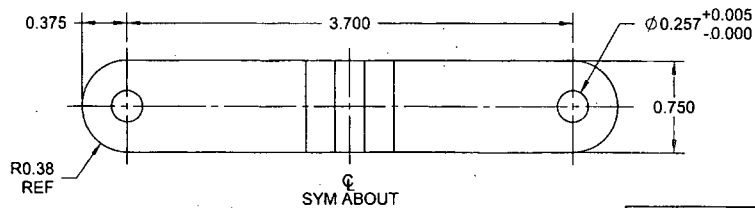
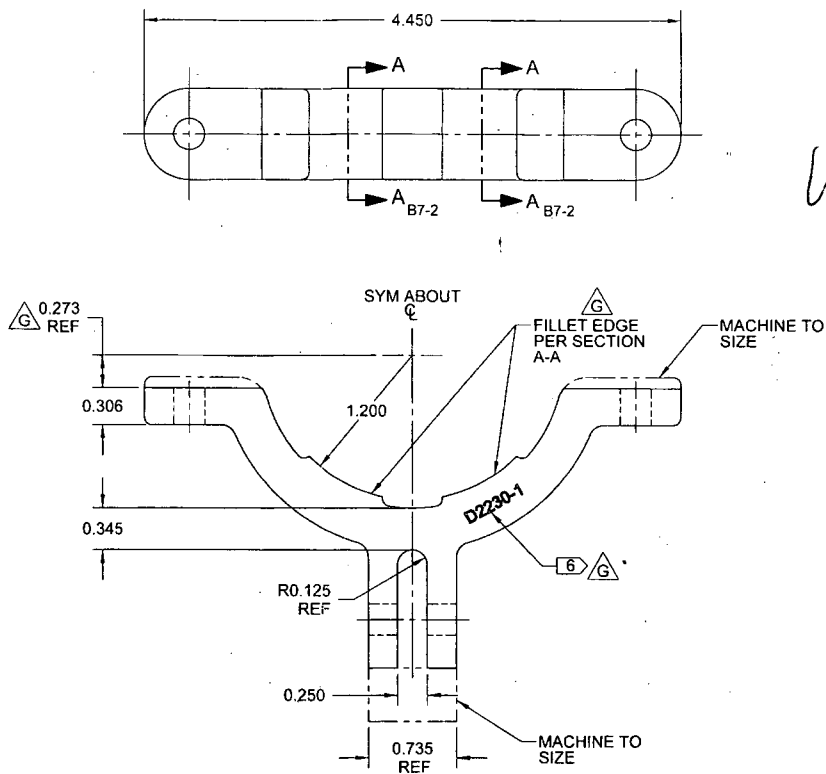
- 1) MATERIAL: MAKE FROM D2423 EXTRUSION
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1  
POWDER COAT WHITE (4.3.5.1) PER DART QSI 005 4.3
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: ENGRAVE PART NUMBER TO A DEPTH OF  $0.010 \pm 0.005$  IN THIS LOCATION, WITH TOOL TIP RADIUS OF  $0.015 \pm 0.005$ .
- 7) WEIGHT: -1: 0.16 lbs  
-3: 0.14 lbs

G	REDRAWN IN SOLIDWORKS TO CURRENT DESIGN STANDARDS. REFER TO SECTION A-A & B-B FILLET ADDED TO PREVENT CHAFING OF RUBBER CUSHION ON INSTALLATION.	AJS	09.01.16
F	REDESIGN: R1.200 WAS 1.100	CP	99.12.13
E	RE-DESIGN	BW	95.01.04
D	RE-DESIGN	BW	95.01.04
C	RE-DESIGN	BW	94.03.30
REV.	DESCRIPTION	BY	DATE
DESIGN	BW	<b>DART AEROSPACE LTD</b> HAWKESBURY, ONTARIO, CANADA	
DRAWN	AJS		
CHECKED		DRAWING NO.	REV. G
MFG. APPR.		D2230	SHEET 1 OF 3
APPROVED		TITLE	SCALE
DE APPR.		MOUNTING LUG	NTS
DATE	09.01.16	<small>COPYRIGHT © 1994 BY DART AEROSPACE LTD  THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.</small>	

**SECTION A-A** D4-2  
SCALE 2X



R0.06 MIN - R0.10 MAX  
2 PL

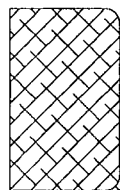


**RELEASED**  
09/06/25 M

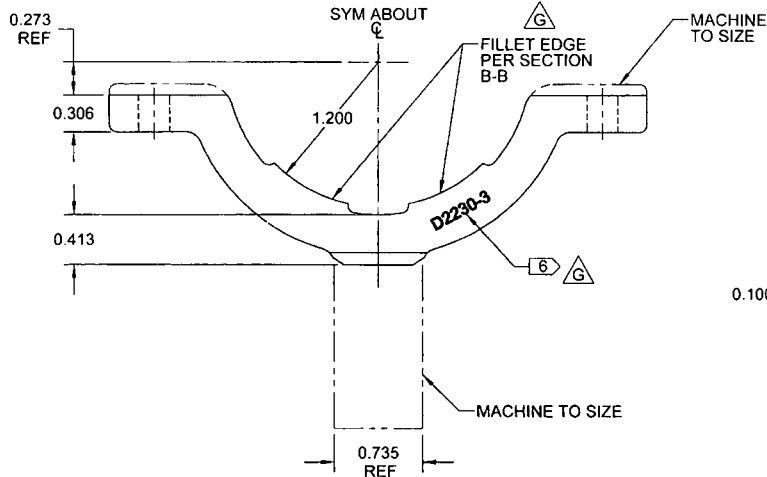
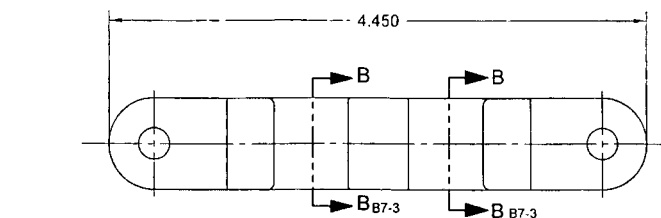
**D2230-1 MOUNTING LUG**

DESIGN	BW	<b>DART AEROSPACE LTD</b> HAWKESBURY, ONTARIO, CANADA	
DRAWN	AJS		
CHECKED		DRAWING NO.	REV. G
MFG. APPR.		D2230	SHEET 2 OF 3
APPROVED		TITLE	SCALE
DE APPR.		MOUNTING LUG	NTS
DATE	09.01.16	<small>COPYRIGHT © 1994 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL, AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.</small>	

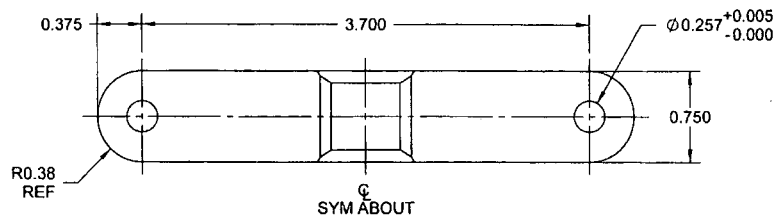
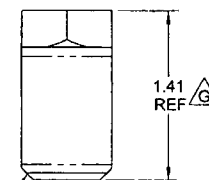
**SECTION B-B**  
SCALE 2X



R0.06 MIN - R0.10 MAX  
2 PL



0.100 X 45° CMF  
TYP



**D2230-3 MOUNTING LUG**

**RELEASED**  
09/06/25

DESIGN	BW	<b>DART AEROSPACE LTD</b>	
DRAWN	AJS	HAWKESBURY, ONTARIO, CANADA	
CHECKED		DRAWING NO.	REV. G
MFG. APPR.		D2230	SHEET 3 OF 3
APPROVED		TITLE	SCALE
DE APPR.		MOUNTING LUG	NTS
DATE	09.01.16	<small>COPYRIGHT © 1984 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR REPRODUCED IN ANY MANNER WITHOUT THE WRITTEN PERMISSION OF DART AEROSPACE LTD.</small>	